

Department of Chemistry
Department of Biochemistry and Biophysics

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SUMMER 1995

**Mazur Chairs
 Growing Program**

While nanoscale technologies are only now beginning to receive national attention, they have been the focus for the materials science program since 1989. The materials science program at Washington State University brings together faculty and students from the traditional areas of chemistry, as well as faculty from physics and materials engineering. The research of these faculty lay at the forefront of structure/property correlations. These correlations are used to improve old and create new synthetic methods for advanced materials. Students and faculty in this program benefit from a multidisciplinary experience by actively participating in work groups spanning three departments and two colleges. Five faculty members in the

Professor Ursula Mazur



(continued page 5)

Reminiscing with Gardner Stacy

Last October Gardner Stacy dropped by to visit and share some of his memories about WSU and a few of his students.

Stacy arrived at WSU in 1948 and always enjoyed teaching. He kept his class material current by modifying his classes each semester to reflect current research by department members and students. Usually while he was out of town, a graduate student would teach his classes. Although Stacy was well liked by his students, there was no way he could compete with one particular student. A comment from this student's teaching evaluation was, "Oh, what a body!"

Over the course of his years here, professor Stacy had approximately six M.S. students, 19 Ph.D. students, and four post-docs. While he was here he reminisced about **Irwin "Ike" Klundt, Jim Cleary, Dick Day** and others including:

- *Bob Pettit*

Stacy "inherited" Pettit as an undergraduate from Harold Rice when he left WSU. Pettit is currently a leader in the field of cancer research and is known for his work in polypeptides and polynucleotides. He has edited a series of books and over 300 articles.

- *Bob Harmon*

Harmon earned his Ph.D. from Wayne State and has had some good results working on anti-cancer agents. Stacy described him as, "an extremely good organic chemist." He is currently an outstanding teacher at Eastern Michigan State University.

- *Steve Razniak*

Razniak is another of Stacy's students with connections to Wayne State. A very outgoing, people person, he is currently a professor at Eastern Texas State University.

- *Richard McCurdy*

McCurdy was one of Stacy's first students. He earned his B.S. degree from Minnesota. After spending some time at 3M, he moved to a college in Los Angeles where he is a professor of chemistry.

- *Richard Mikeulick*

Stacy remembers Mikeulick as an,

"overachieving researcher". He preferred to work late at night when he had few distractions. The faculty was concerned for his safety and insisted that he follow certain precautions. Luckily for the entire department, Mikeulick's unusual work habits put him in the right place at the right time. Late one night, he noticed an unusual flicker of light from behind a closed laboratory door. He broke into the lab and extinguished a fire that had the potential to burn the entire building had he not caught it in time.

- *Buford Barnett*

Stacy described Barnett as, "a terrific person." He is the only industrial chemist at Rockwell International which leads to some interesting projects. For example, Barnett was asked to determine the identity of a mysterious white powder which was found in the women's restroom. After some work, Barnett discovered the powder was nothing more than a crushed birth control pill.

Reflections on being ACS president:

During his three year span as president of the American Chemical Society Stacy had mixed feelings about the position. On one hand, it was a time consuming job, requiring a lot of travel and he missed his students. On the other hand, Stacy enjoyed the travel and the opportunity to meet new and exciting people. One trip he was especially looking forward to was the international meeting of European leaders of Chemical Societies which meets every two years. Unfortunately Stacy was forced to miss the meeting due to illness. Although, he reported that he did get a lot of work done while recuperating from surgery in his hospital bed.

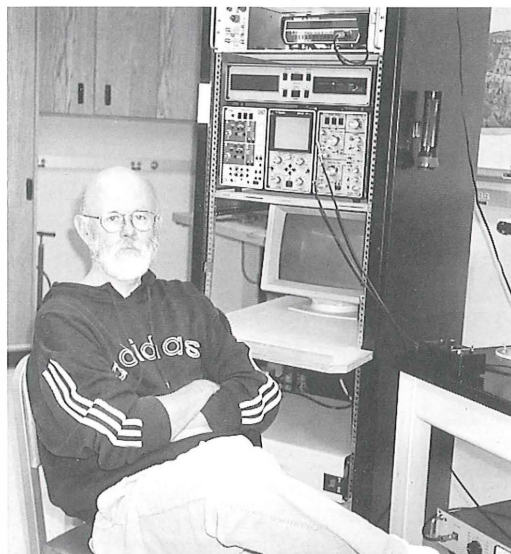
Editor's Note: This article was written before Professor Stacy passed away on April 30, 1995 after a short battle with cancer. His family requests that memorials be made to either WSU's Stacy Research Endowment or to the Cathedral of St. John in Spokane. ❖



Faculty Spotlight

The department's newest inorganic faculty member is James Hurst. He describes himself as a small town person by nature and reportedly has adjusted quickly to leaving Portland and living in Pullman. Professor Hurst came to WSU in 1993 after spending 23 years at Oregon Graduate Institute (OGI). At OGI he had an extremely successful research program, but teaching is very important to Hurst as well; his decision to leave OGI was based, in part, on the fact that he missed the interactions with undergraduate students. His first semester here he taught freshman Chemistry 105 which had an enrollment of over 300 students. He really enjoyed it and is enthusiastic about teaching it again this spring. He is full of ideas to expand the class, including using multi-media and computer graphics to explain difficult concepts in 3-D rather than relying solely on lecturing. He enjoys the atmosphere at WSU because he feels it is a community devoted to working together to achieve common goals.

Hurst has four graduate students working in his lab: two chemists and two biochemists. Most are finishing their coursework and are beginning to make some real progress in the laboratory. The most senior member of the group is Sergei Lyamar, a research associate from the former Soviet Union. Sergei was working in the U.S. on a scientific exchange at OGI when the Soviet Union disintegrated



Professor Jim Hurst

and he decided it would be better if he stayed here.

The group is working on defining the oxidative chemistry of white blood cells, specifically neutrophils and macrophages. When white blood cells encounter bacteria they exhibit an unusual trait known as respiratory burst. Oxygen undergoes a series of reactions which result in reactive compounds, one of which is bleach. The identity and mechanisms of the other reactions are currently unknown. Peroxide or superoxide ions seem to act as a precursor to the toxic agents. The group is also studying the role of the enzyme

myoperoxidase. The results of their research could someday be significant in improving the therapeutics of curing disease.

A separate but closely related focus of the lab is to study the use of membranes to control chemical reactivity. They are using light to turn off and on electron transport across membranes. The approach used in this group is to organize an integrated series of chemical reactions on membranes that will lead to light-driven splitting of water into H_2 and O_2 . This research has broad ramifications in molecular electronics.

The research is of interest to groups around the world. Hurst just returned from a trip to Russia where he initiated planning for collaborative research with a team of Russian scientists.

The Department of Chemistry welcomes professor Hurst and is pleased to have him join our team. ♦

Biochemistry/Biophysics Briefs

by Gerald L. Hazelbauer, Chair

At the beginning of this academic year I became chair of Biochemistry and Biophysics, taking the position that Michael Griswold had so ably filled for the previous eight years. Mike did an outstanding job, and I hope to maintain the high standards he and previous chairs have established.

As you may be aware from previous "Fulmer Notations", since 1989 I have been the Director of the Biotechnology Training Program, which involves our department and six Ph.D. programs in four colleges across campus. NIH renewed the grant supporting this Training Program for its second 5-year period, 1994-1999. Having been Acting Chair of Biochemistry and Biophysics in 1989-90, while Mike Griswold was Acting Dean of Sciences, I was concerned about being able to fulfill the responsibilities both of Chair and of Training Program Director. The solution was to appoint an Associate Chair of Biochemistry and Biophysics.

Gerald Hazelbauer



Raymond Reeves has graciously agreed to fill the position, and to take the responsibility of Acting Chair for the calendar year 1995, during which I will be on sabbatical. Ray has already been of great help and I expect he will make my sabbatical worry-free.

Upon becoming the new chair, I spoke with various individuals and groups in the department and I was particularly impressed by

my interactions with the Biochemistry Graduate Student Association. This group has done much for the *esprit-de-corps* among our graduate students. In our meeting, the

group made several thoughtful suggestions for improving our instruction and evaluation of graduate students. All the suggestions were readily adopted by the faculty. This is just one example of the enthusiasm and seriousness of our graduate students. Those of you in the position to advise students about prospective graduate schools should certainly include WSU in your recommendations to your best and brightest.

Our newest assistant professor, Chulhee Kang, arrived on campus this autumn and is in the process of setting up his x-ray crystallography laboratory. The hiring of Chulhee and the funding of the necessary x-ray crystallography equipment by a grant from the Murdock Foundation were in large part the result of the extended efforts of Bruce McFadden. We are extremely grateful to Bruce for the time and energy he devoted to this important step in our development of structural biology at WSU.

Marty Pall announced recently that he will leave Pullman (but not WSU) in the summer of 1995 to become Coordinator of Sciences at WSU's branch campus in Vancouver. Marty will have the opportunity to hire the first science faculty for that campus and plans to focus on the biological sciences. Marty has been a key individual in graduate instruction in the areas of genetics and molecular biology, and thus we were fortunate to have obtained permission for an immediate search for his replacement in the area of control of gene expression.

It is noteworthy that since 1981 when I came to WSU, the faculty of Biochemistry and Biophysics has grown substantially in number and significantly in stature and recognition both nationally and internationally. Although many faculty have been courted by other institutions, none have left. This pattern is a strong endorsement of the quality of our department and institution. ❖

Notes from the Chemistry Department

by Roger D. Willett, Chair

The Chemistry Department is entering a growth phase that is projected to continue over the next decade. This is a welcome relief after struggling through a decade of retrenchment and shrinking state revenues. The growth is a result of two factors: renewed interest in scientific and science-related careers by students and a projected fifty percent growth in enrollment due to the "baby-boom echo". Both will put strains on our instructional resources, but give us the opportunity to expand our instructional and research activities. We hope to use this to our advantage in our efforts to diversify our program into such areas as environmental chemistry, materials chemistry and biological chemistry.

Research activities in the department continue at a healthy pace. In particular, **Ken Mopper** (chemical aspects of the ocean's environment), **Don Matteson** (clinical organic synthesis) and **James Satterlee** (NMR studies of metalloproteins) have been exceptionally successful in attracting major grants. **Bruce Eaton** has ties with a bio-tech firm with applications of his organo-metallic synthesis. **Kerry Hipps** and **Ursula Mazur** continue to spear-head our efforts in materials chemistry.

The Chemistry Department added three new faculty this year. **Kirk Peterson** and **Amy Gamerding** join us at the Tri-Cities campus. Kirk is a theoretical chemist looking at gas phase species important in environmental issues. Amy is a soils chemist who joins us from the University of Rhode Island. Her interests are in the processes involved in transport of pollutants in the soil. This fall, **St. John Dixon-Warren** will be joining our Pullman faculty adding strength to our physical/materials chemistry interest. St. John is a Pacific Northwest native (British Columbia) with interests in the catalyze processes occurring on metal surfaces.

We received permission to add two new faculty to our Pullman staff. A search is currently underway for a person with research interest in environmental chemistry. We look for this person to bolster our increased activities in this area at both the graduate and undergraduate levels. A search with emphasis on chemical education will be initiated shortly.

On the instructional side, the increased enrollment at the freshman and sophomore levels coupled with the directive to develop new general education science courses have necessitated the dedication of more resources to these activities. A new general chemistry laboratory supervisor position has been established and we are also seeking an instructional technician to be responsible for the analytical laboratory operation. We have also been fortunate in receiving substantial support for the undergraduate laboratories this past year.

In summary, this year has seen continued successes in research and growth of our department. ❖

(Mazur Chairs Growing Program Cont. from page 1)

Department of Chemistry are also on the Materials Science faculty: **Jeremy Evans**, **Kerry Hipps**, **Ursula Mazur**, **Ronald Poshusta** and **Roger Willett**.

All three departments have worked to dissolve the traditional college and departmental lines in favor of a problem-oriented program. The field of materials science comprises a wide range of theoretical and experimental approaches and draws upon a number of disciplines. Students are encouraged to obtain broad-based training through one of the three possible tracks (chemical physics, materials engineering

and materials physics & chemistry). The students' committee which is selected specifically to reflect the students' thesis problem assembles the curriculum and preliminary examination to best reflect the mix of disciplines necessary to prepare the student for his or her research.

Professor of Chemistry & Materials Science, Ursula Mazur was named to chair this growing program. She has selected as her top priorities: locating additional funding for outstanding graduate students and increasing the effectiveness of graduate recruiting. The department admitted three new graduate students for the 1994/95 year, bringing the total number of students up to 25. A new faculty member, **St. John Dixon-Warren** of British Columbia, has just been hired in physical chemistry and will probably join the Materials Science faculty soon. ❖

Alumni News



Please continue to send us information about what you are doing in the enclosed postage paid envelope. Thank you!

10's

Floyd R. Smith (B.S. '13 agriculture) passed away last February in Yakima. At the time, he was WSU's oldest living graduate. While a student in agriculture, Smith also studied chemistry and remembered his organic chemistry class taught by Elton Fulmer as one of his favorites.

20's

Theodore T. Budrow (B.S. '23) has written a book called "Stories of Mexico" and is looking for a publisher. It includes 19 short stories by 18 Mexican authors which Theodore has translated from Spanish. He reports that it is a good look at life in Mexico.

Vernon Ricketts (B.S. '28 chem) a long-time resident of Pullman passed away in 1994. He worked as a research chemist for Shell Oil Co. during the 1930's and was active in his community until his death.

30's

Marvel-Dare (Fellows) Nutting (M.A. '30) made a generous contribution to the C.C. Todd Memorial Scholarship. She spent nearly two years under professor Todd as a teaching fellow and received her M.A. in Physiological Chemistry with Harry Cole as her advisor. She continues to enjoy *Pipeline* and *Hilltopics*.

Martha Miller (B.S. '33) made a memorial contribution to the chemistry development fund in honor of Carl Brewster.

Lester Lyle Winter ('36 chem. engr.; '39 Ph.D. chem) age 81 from Fountain Hills, Arizona passed away on January 1, 1994.

While at WSU he was a student-lab professor. He retired from Union Carbide in 1976 after 38 years as director of research.

40's

Otis W. Fortner ('41 MS) wrote to say that he and his wife **Eula** enjoyed their spring visit as a guest of the Chemistry Department on the occasion of his 50th anniversary as a WSU Chemistry Department faculty member.

George Millard (B.S. '42 chem; M.S. '55 chem) passed away last spring. He was a retired professor and chair of the chemistry department at Yakima Valley Junior College.

Laurence Peterson (B.S. '43 chem) retired as technical director of Master Processing Corp.

50's

Douglas Eaton (B.S. chem '51) passed away last summer. Our condolences to his wife Emogene.

Chuck Millard ('53 chem) is a part-time chemistry instructor at Yakima Valley Community College.

James Ruck ('54 chem) and his wife **Lee** ('54 home ec.) live in Everett. Jim is a manufacturer's representative. He shows his WSU spirit with his license plate which reads "WSU 54".

Glenn E. Brand (Ph.D. '56) and his wife **Janet** have contributed to the Edward Wagner Memorial Fellowship. Glenn appreciates Dr. Wagner's contribution to his education both as a professor and a friend.

60's

Roland W. Lovejoy ('60 Ph.D. chem) has retired from Lehigh University, where he served as an adjunct professor for one year.

Michael J. Millam, PhD (B.S. '61) has

written a number of humorous limericks concerning chemistry and the other sciences. These poems have been published in local poetry anthologies and science newsletters. Examples include "Chemical Quackery" and "pi a la Mud."

Darryl DesMarteau, Ph.D. (B.S. '63) is a Tobey Beaudrot Professor of Chemistry at Clemson University and is the recipient of the Charles H. Stone award. He is being recognized for the significant contributions he has made to the field of fluorochemical research. He has received several other awards including the 1983 ACS Award for Creative Work in Fluorine Chemistry.

80's

Gregory Plunkett (Ph.D. '80) is a senior research chemist at Miles Inc.

Mark Applegate (B.S. '81 chem) is a Health and Safety Manager for the City of Seattle.

Juan Lozano (B.S. '81, M.S. '83 chem.) is an assistant professor of chemistry at Lakeland College in Sheboygan, Wisconsin. He earned his Ph.D. from the University of Wisconsin, Madison.

Lars Ensign (B.S. biochem) is enrolled at the University of Washington School of Medicine.

Harvey Steensma (B.S. chem '86; MBA '88) is in graduate school at Indiana University.

Neil Cutshall (B.S. chem '86) is a graduate student at North Carolina State University. He and Jennifer Chamberlin were recently married.

Wendy Neal (B.S. biochem '86) is a Ph.D. student at the University of Idaho.

Bill Hiscox (B.S. chem '87) recently graduated from Montana State University with a Ph.D. in chemistry. Congratulations!

90's

Mark Pressprich (Ph.D. chem '90) received the Sidhu Award for 1993 for his work at SUNY-Buffalo. He was recognized for his contributions in the field of crystallography and diffraction made by an investigator within five years of graduating with the Ph.D. degree.

Yumi Fujii lives in Japan and works for Nippon Paint Co., Ltd., a surface treatment company. ❖

Golden Grads Update



Each spring WSU holds a reunion for alumni who graduated 50 years ago. Below is information on those who returned for the 1994 festivities:

Jack Watkins, Spirit Lake, ID. After graduation Watkins spent two years in the U.S. Navy as a navigator and radar officer. After the war he was a process engineer in a chemical plant for two years. He eventually went to medical school and became an orthopedic surgeon. He and Beverly Smith (WSU class of '46) were married and had three children. Later Dr. Watkins married Shirley Hornich. Watkins started the Northwest Orthopedic and Fracture Clinic of Spokane in 1956. He retired in 1984 and enjoys spending time with his family, boating in the San Juans, hunting, fishing, skiing, and snowmobiling.

Henry Wittrock, Santa Rosa, California. In 1949 Wittrock earned his master's degree in physical chemistry from the University of Wisconsin where he met and married a fellow chemist, Peggy Killingbeck. His career in industrial chemistry included two years

at Union Oil's refinery in California, three years at Thomas Edison in New Jersey and 30 years with Kaiser Aluminum in Spokane. The Wittrocks have three children. He retired in 1982 and they enjoy traveling.

Helen (Kurz) McAferty, Orange, California. Helen moved to Berkeley in 1944 and married Hal soon after. While he was overseas she worked in Colorado and Kansas. She earned her master's degree in chemistry from the University of Colorado in Boulder. She worked at Shell Development Co. in California. She retired from Shell in 1950 and taught chemistry at Orange Coast College for 25 years, retiring in 1988. Helen and Hal had two children and have four grandchildren. She enjoys traveling and volunteer work. ❖

Faculty & Student News



Glenn Crosby was elected to the Board of Directors of American Chemical Society.

Ruby Ronald, wife of Professor **Rob Ronald** passed away in a car accident. Mrs. Ronald was an associate professor of music.

A feature article authored by **Kerry Hipps** and **Ursula Mazur**, entitled, "Inelastic Electron Tunneling: An Alternative Molecular Spectroscopy" appeared in the Journal of Physical Chemistry. One feature article appears per issue and submissions are by invitation only.

Bob Heffron, a Materials Science Program graduate student working with Professor Hipps, was awarded a Research Associate (RA) position for the spring semester by the Materials Science Program. Only two or three RA positions are awarded per year, based on the student's potential for accomplishment and appropriateness of their research in the context of the program's mission. Heffron is only the second chemistry student to receive this honor.

Albena Dinkova-Kostova, was awarded the best oral paper at the 1993 meeting of the Phytochemical Society of North America. She works with Professor Norman Lewis of the Institute of Biological Chemistry. Her thesis research is on lignan biosynthesis in *Forsythia intermedia*, focusing on the purification and characterization of the enzyme pinoreosinol/Iriciresinol reductase.

The Editorial Board of Accounts of Chemical Research recognized **Johanna Norton**, a graduate student in the Department of Chemistry, as the best first-year student with a one year subscription to the journal "Accounts of Chemical Research". She is an excellent teaching assistant and has begun research with Professor Roy Filby.

The College of Sciences announced that Professor of Biochemistry & Chemistry,

Ralph Yount was the recipient of a Meyer Distinguished Professorship. Yount is internationally recognized for his study of the proteins in muscular contractions. He is president of the Biophysical Society and received the WSU Distinguished Faculty Award in 1989.

Helen Place was one of three WSU faculty to be honored as an "Outstanding Faculty Member for 1994" by the WSU chapter of the Mortar Board honor society.

Christine Hilton of Kamiaken High School in Kennewick was awarded an Alumni Leadership Award. Recipients were selected based on their history of academic excellence, achievements, leadership, and community service. Christine is an undergraduate majoring in biochemistry.

Max Roundhill, formerly a WSU professor of chemistry, returned to Pullman to give a seminar entitled, "Platinum-pop; the Final Chapter".

Congratulations to the following students who have completed the requirements for their Ph.D. in 1994:

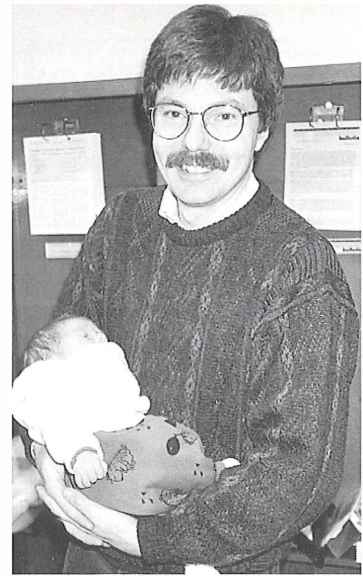
David Atkinson, chemistry
Yong-Hong Chen, chemistry
Geoffrey Lee, biochemistry
Jennifer Kahl, chemistry
Michelle McConn, biochemistry
Susan Meiergerd, chemistry
James Mueller, biochemistry
Paul Nakata, biochemistry
Durwin Striplin, chemistry
Donald Wang, biochemistry

Harold Dodgen, professor emeritus, was recognized by ACS for being a member for at least 50 years. ❖

Newest Arrivals



- Sean Gregory was born to David & Lorna Brown in October of 1993. He weighed in at a hefty 10 lbs, 6oz! Dave is a post-doc in Professor Michael Smerdon's lab.
- In 1993, biochemistry professor Jeremy Evans and his wife, Michele, celebrated the birth of their first child, Matthew.
- Tyler Marsh was born to Gayle and Dave Marsh. Gayle was a TA in chemistry and David is a technician in Professor Mike Griswold's laboratory.
- Marylse Peyou-Ndi had a busy spring semester in 1994. She started graduate school in the biochemistry department in January, then in February she gave birth to a son. She works with John Browse in the Institute of Biological Chemistry. ❖



Matthew & Jeremy Evans

Skinner Returns to His Alma Mater



Michael Skinner earned his Ph.D. degree from WSU in 1982. His thesis advisor, Michael Griswold invited him to return to his alma mater to give a seminar entitled, "Mesenchymal - Epithelial Cell Interactions that Regulate Gonadal Growth and Differentiation". Skinner is currently an associate professor at the University of California in San Francisco in the Departments of Obstetrics and Gynecology and the Department of Reproductive Sciences.

After graduating from WSU, Skinner worked with Professor Fritz at the University of Toronto for two years. He later joined the Vanderbilt faculty for seven years in the Department of Pharmacology.

His research focuses on cell - cell interactions. Specifically, how mesenchymal cells within a tissue direct the development of epithelial cells within the same tissue. His research has significance and applications in reproductive fertility and control. It could also prove to be useful in the study of prostate and ovarian cancers.

When deciding upon a graduate school, Skinner chose WSU specifically to work with Professor Griswold. Other members

of his class were: Jim Wells, Jody Hoganvick, Jim Merriwether and Steve Sylvester.

When asked how WSU and the Department of Biochemistry/Biophysics looks now, returning to WSU more than ten years after graduation, Skinner was impressed with the "great new facilities", how the department has grown, and the students on the biotech training grant. ❖

Michael Skinner, right, pictured with his mentor, Michael Griswold

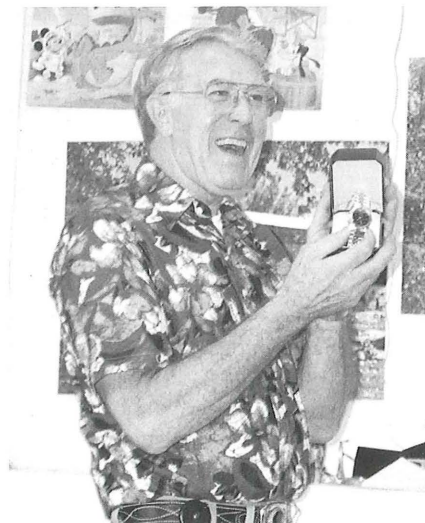


What We've Been Up To . . .

Max Roundhill, former WSU professor of chemistry, returned to Pullman to give a seminar. Here he is pictured with his host, Ursula Mazur.



Long-time stockroom attendant Gene Watson and his wife Terri celebrate at Gene's retirement party.



Ray Albrook and Liz Wilhite tie the knot on Valentine's Day. Ray has worked in the department for 21 years in the stockroom. Liz was a post-doctoral student in Professor Glenn Crosby's group.



THANK YOU

A Partial Honor Roll of Donors

The Department of Chemistry and the Department of Biochemistry and Biophysics thank you for your support! Due to the large number of donations, the following list reflects only gifts from late 1993 until the summer of 1994. In the next edition of Fulmer Notations we will catch-up on the remaining donations. Thanks again for your generosity!

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(Lifetime gifts of \$1,000,000 or more)

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+William '33 & Ellen Shelton

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Donald & Susan Hatton Havre '68

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James P. Olson '76
Ramsay '37 & Roleen Schlademan
Frederick J. Schuetze '80
Scott & Nancy Pipkin Stowell '68, '70
Nelson '38 & +Patria Sweetser
Robert '59 & Lois Wendt
Mark R. Winkle '81

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(Gifts of \$100 or more)

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Robert '60 & Karen Adler
Harry Ago '72
Jeffrey Alker '75 & Laurel Leach
Nancy Honn Allen '63
Ann McKenney Ames '69
William '65 & Ann Amies
Donald & Dana Garen
Anderson '71, '69
Herman & Mariette Moser
Anderson '35, '39
Marc '78 & Roberta Anderson
Dale Antles '37
Laurence D. Ashley '70
James '75 & Liz Austin
Kendall '70 & Janet Ayers
Carl Baker & Kimberly Lessor '88, '87
John Bartleson & Cheryl Sutt '91, '92
Raymond P. Bayer '61
Shore & Amy Campbell
Beckel '83, '82
William '60 & Susan Belcher
Jacob '41 & Grace Bigeleisen
Walter '64 & Judith Black
Daniel '69 & Carole Blake
Frederick '41 & Rita Bollinger
Dan B. Borchardt '85
Glenn '56 & Janet Brand
Robert '54 & Jean Brotherton
Wayne R. Bryson '71
Theodore T. Budrow '23
Eugene '51 & Ruth Bulgozdy
Robert '68 & Diana Bushey
Ronald '73 & Sheri Butler
Philip '81 & Susan Busby
Charles '41 & Brownie Cameron
Daniel L. Carlisle '90
Joseph '86 & Amy Carter
Dick R. Casali '88
Richard '69 & Betty Castle
Kun '65 & Ann Chang
Geoffrey & Marcia Albert
Charlton '79
David J. Clark '58
John & Carol Baker Clark '69
James W. Cleary '53
David B. Cleave '60
Neil '83 & Jana Cochran
Douglas '90 & Leigh Matson
Cole
Dennis '74 & Nancy Cox

Richard & Marjorie Jones Cox '69

Steve & Linda Barmuta
Cranfill '64
Grace Vanwoudeberg Crisp '55
Phillip '54 & Maxine Davenport
Rodney '66 & Bertha Davidson
Charles Davis & Nancy Stevens
Walter '76 & Shirley Ditlefsen
Ronald '69 & Marilyn Dobson
Doris Heitman Dodge '62
Gary & Linda Boys Dukelow '63, '64
Todd & Rebecca Goetz Duskin '85

Steven E. Earnest '70
James & Catherine Ebbert '67, '66

John & Elisabeth Vanprooyen
Eke '57, '58

Carl H. Elling '41
Seddon '60 & Felisa Englung
John H. Estes '52
Sandra Pettee Fadeff '81
Richard '64 & Betty Baker
Faletto

Donald '62 & Nancy Filion
David '75 & Sigrid Flatness
William '81 & Mary Fordyce
Otis '41 & Eula Fortner
Frank Fowler '70
James & Rebecca Christian
Fox '90

Robert & Ilene B. Franco
Arthur R. Franz '35

Lawrence L. Fritts '87
Wayne C. Fuqua '73

Craig & Lori Backstrom
Gabler '75, '77
Clarence '33 & Arcile Green
Thomas & Betty Hummel
Griffith '51

Philip J. Grimm '73
Gene '73 & Joanne Guttormsen
Carl '74 & Venus Harmon
Allen G. Heide '66
Jeffrey & Debra Schneider
Hicks '81

Michael & Kathryn Larson
Holdren '72

Henry & Dorothy Dejong
Homann '64

Dennis & Denise Hopkins '76
Charles & Ramy Hough '46
Mahlon '87 & Laura Hull
Robert & Vera Power Hunter
'50, '56

Samuel '74 & Terrill Hurlbut
Stacy K. Irwin '90
Allen & Patsy Moon Jackson
'72

Ronald & Marilyn Wiswell
Jagels '69

Richard J. Janusz '69
Mark Johnson & Susan

Roberson '84, '81
Paul '68 & Joann Johnson
Cecil & Vera Russell Jones
'47, '48

Kimball E. Jones '68

Jay & Beverly Roberts Kent
'61, '60

Manley '40 & Phyllis Kjonas
Carl & Willa Kludt '61
Nicholas I. Kosin '76
Stanley C. Kowalkowski '84
Robert '53 & Shirlee Kramer

Marshall '79 & Marcella Lane
Vernon '53 & Kit Larson
Christina L. Loechelt '79
Robert & Sue Loesch Fries '69
Michael & Linda Ogren Long
'77

Lawrence '33 & Mary Lowell
James '69 & Janet Lute
Hugh '40 & Margaret
MacAulay '40

James '62 & Sonja Main
Mark '68 & Judy Mains
Cheryl S. Malone '70
Richmond '43 & Anne
Marshall

Daun A. Martin
David M. McCandless '81
Ernest & Ardis Hines
McKibben '42, '45

Brad A. McMullen '77
William '49 & Geneva
Melendy

Sherri L. Mikkelsen '85
Jeffrey '73 & Kathleen
Buckley Miller

Martha Walters Miller '33
David '62 & Virginia Milne
Frances W. Milne
Eric & Katharine Kennedy
Mintz '73

Emmet '51 & Diane Moore
Earl W. Murbach '52
Raymond '40 & C. H. Myhre
Andre & Margaret Jensen
Nebolon '52

Stuart & Anne Cheney Novak
'62
Richard & Terrina Nuss '78
'80

Paul & Maria Jones Nutter '78,
'79

Marvel Fellows Nutting '30
Brian & Mary McNeil Opitz
'79, '78

Ronald '76 & Pamela Parry
Robert '50 & Mary Parsons
Kenneth '63 & Ruth Peacock
James '70 & Kaethe Pinnell
Margaret J. Pitts '46

Gerald R. Poff '84
Karl '84 & Rita Pool

Ray & Margie Hochstatter
Prichard

Robert & Kristin Magula
Privette '75

Thomas & Catherine Monroe
Proteau '56, '58

Richard & Gayle Kuelper
Putnam '60

Russell Pylkki & Kathryn
Combs '79, '78

James C. Ramerman '85
Timothy & Jackie Philleo
Randall '73, '75

Thomas & Beverly Rauchfuss
'75

David & Sandy Cline Rawls
'64, '63

John '51 & Violet Raymond
Douglas '69 & Pamela Rector

Robert S. Rew '68
Robert & Jennifer Spalding
Rickman '77, '91

Donald & Loretta Reich
Rippepe '79

Jack Robertson '49
Charlotte E. Roderuck '42

Gail Newcomb Salo '62
Joseph '86 & Teresa Sebastian
Jack B. Secor '57

Richard & Deborah Short '76
David '70 & Donna Simonson
Sandra L. Slichter '65
Bruce C. Smith '79
Robert & Elaine Foskett Smith
'63

Elmer & Esther Ellenberger
Sniff '60

John & Carol Sokatch '58
Todd '82 & Terri Somers
Paul R. Spencer '63
Roger Sperline & Sue Roberts
'77, '78

Frank '32 & Esther Springer
David & Janet Jewsbury
Stephenson '58, '57

Mildred Stephenson
John & Alice Benson Strand
'48

Howard '42 & Shirley Strobel
Barbara Oft Struthers '62
Rodney L. Swanson '68
James W. Symonds '86

Charles & Helen Burr Tilford
'34

Traci B. Topping '83
Darrin T. Toth '86

William Unga & Virginia
Knowles '73, '69

Michael Urdea & Jeanne
Savarese '79, '78

Alan & Dawn Kopp Wakeley
'85

James '64 & Norma
Waldbillig

Brian Warner '81 & Jennifer
Clyne

Douglas X. West '64
Robert '61 & Stephanie West
Jack '62 & Judith Westerman

Roger & Thelma Willett
Glen D. Williams '37

Kirk C. Williams '70
Stephen '83 & Helen Williams
Riley '81 & Cindy Wilson

Ronald '72 & Maria Yates
Carl & Mary Betcher Zaremba
'70, '71

Stephen '83 & Helen Williams
Riley '81 & Cindy Wilson

Ronald '72 & Maria Yates
Carl & Mary Betcher Zaremba
'70, '71

Carl & Mary Betcher Zaremba
'70, '71

Carl & Mary Betcher Zaremba
'70, '71

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'70, '71

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'70, '71

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'70, '71

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'70, '71

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'70, '71

Carl & Mary Betcher Zaremba
'70, '71

Carl & Mary Betcher Zaremba
'70, '71

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'74, '82
Virginia Karshner Berridge
'47
Byron W. Blomquist '84
William A. Bogen '85
Peter '63 & Scherion Bohlke
Curtis '48 & Leona Phifer
Borchers
Gregg '87 & Linda Borselli
Donald '42 & Lorrain Boyle
Perry '63 & Birgit Brake
Dennis M. Breslin '71
Alex J. Brown '76
Michelle N. Brown '88
John M. Bruce '51
George '65 & Shirley
Buonocore
James '49 & Dorothy Crosby
Burgess
Rocky '84 & Joni Calkins
John '62 & Carol Campbell
John '64 & Nancy Carlson
Mark '81 & Kimberly Chen
Erik R. Christenson '86
Douglas '79 & Rebecca
Christie
Richard N. Clark '91
Shawn '93 & Christina Clark
J. F. '55 & Janet Clarke
Scott '81 & Therese Clauss
Darrell '65 & Rosalee Clavey
James '91 & Teresa Clifton
James '56 & Patricia Coke
Betty Budd Cook '47
Louis & Diane Thomson
Criez '52, '51
Joseph '80 & Ruthanne
Crowley
Randy '82 & Melodie
Cummings
Allen & Millicent Martine
Day '65
Douglas W. DeLong '85
Davenport D. DeMeyer '92
Darryl & Arlene Noel Dickey
'63, '61
Roy '72 & Carol Draggoo
Larry & Kathleen
Merryweather Dressel
'74, '71
Christopher '74 & Susan
Dunagan
Randy L. Eatherton '87
David L. Eck '67

Robert '58 & Mona Elliott
Lawrence '52 & Jeannie Eng
Lars D. Ensign '91
David C. Evans '79
Kristine L. Ewing '76
Richard E. Ewing '58
Irvin C. Feustel '26
Larry & Shairlyn Fish '86,
'88
Kevin '75 & Cynthia Foley
Dean '72 & Cindi Fondahn
Robert Foster '49 &
Katherine Clodius
Lois R. Fowler '85
Steven Frank '89 & Barbara
Stallard
Donald & Kathleen McCray
Franklin '74, '75
Lawrence '67 & Shirley Fricke
Daniel '76 & Mary Gaffney
James '74 & Peggy Gagliardi
Lawrence '61 & Trudi
Gannon
Dian Gay '77
Jindy M. Gelow '73
Jonathan Gershenzon &
Kimberly Falk '87
Alexander '84 & Lori
Gholson
Andrew W. Gieschen '86
Gary & Gwendolyn Bowers
Gilchrist '77
Dennis & Janet Gillingham
'69, '88
Ronald B. Giuntoli '72
Lawrence & Kimberlea
Warrior Green '71
Wesley & Karen Grossman
'87
James D. Groves '51
Gunnar's Auto Supply,
Incorporated
James D. Guptill '73
Jerry & Diane French
Hamacek '77
Edward A. Hanson '58
George E. & Doris L. Harris
James '72 & Anne Haugen
Einar Hendrickson '49 &
Marles Henderson
Bradford '73 & Elke
Herrington
Ronald '85 & Martha
Highland

Wayne A. Hildebrand '74
Christopher B. Hill '89
Herbert & Jannette Hill '85
William C. Hiscox '87
Rodney & Katherine Taro
Hoff '45, '49
Craig '68 & Sally Hopkins
Jack & Marcy Tenwick Horne
'69, '85
R. & Mary Bayne Hunziker
'65
John P. Hurmey '74
Felib Iskander '82 & Soheir
Maximoss
Ned & Jeanette Jones Jenne
'64, '70
Chris J. Johnson '73
Dennis '70 & M. Johnson
John '72 & Elsie Johnson
Erik & Stephanie Jonson '93
Alan '77 & Jan Jordan
Aniko M. Juhasz '86
Malvin T. Kamimoto '68
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Pat Kennedy '64
Darleen Johnson Kent '61
Larry & Mary Terrana
Kirchner '69, '70
Charles R. Kissinger '79
Manley '40 & Phyllis Kjonas
David '71 & Jean Klint
Richard Knochenmuss '82
Robert & Marguerite Graham
Koppe '51, '52
Keith & Trudy Henriksen
Kramer '71, '70
Janet M. Lansingier '80
James '86 & Elizabeth
Lawrence
Ray '76 & Cynthia Abhold
Ledgerwood '78
James '65 & Lloye Liedtke
Angela A. Lilly '92
Peter '54 & Mary Bousliman
Linde
Kenneth & Barbara Sandlin
Lisk '76
William '41 & Carol Low
Robbe & Gloria Aylesworth
Lyon '70, '73
David & Lisa McKain
MacNair '83
David & Josette Cella
Maddison '68, '65
Frank Maranville '42

Elizabeth M. Marchant '83
Ralph '82 & Lori Maurer
Gary L. Maynard '76
Terrell D. McClinton '73
James & Mary McCray
Gloria Shepard McGregor '49
Carla McKenna '73
Stanley C. McKinley '71
Frank '36 & Sara Amos
McMurry
David L. Mee '84
Norma B. Mesler
Richard '53 & Caridad
Mikulec
Leo & Thora Thorsteinson
Millam '32, '34
Michael & Lois Meyer Millam
'61, '63
Edward '63 & Sharon Miller
James '64 & Kathy Miller
Charles M. Miner '83
Carl '35 & Alice Minor
Emmett '51 & Diane Moore
Martha R. Moore '86
Archer '31 & Mary Mortland
Dennis C. Myers '63
Julie L. Nabozny '90
Lawrence & Wendy Weeks
Neal '86
Shane & Janet Needham '93
Desmond '55 & Beverly Neff
John '33 & Maxine Nelson
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Nevada
Mark S. Nissen '81
Mark & Linda Bloom Norberg
'74
James M. Nowak '39
Gerald W. O'Bannon '80
Noah A. Palmer '63
Brian & Ellen Webber
Pankuch '68
Anthony '61 & Irene Papa
Sam & Marlene Pappas
Gunnar & Elaine Hayashi
Petersen '83
Mary Reynolds Potter '41
Ralph '48 & Elaine Potter
Nicholas L. Powers '83
Jonathan E. Preston '89
William & Cindy Immasche
Price '80
Mariam Anderson Proctor '50
John & Elsie Fullenwider
Reid '30, '32
Fredrick '64 & Denise Reinke
Sibley Reppert & Christine
Vezetinski '68

Ernest '73 & Linda Shepherd
Riedel
Jason '92 & Shantrell Ritter
Thomas '70 & Janee Roche
Gilberto '78 & Lourdes
Rodriguez
Daniel '65 & Dinaz Rogers
Rollie '64 & Irene Ruelhman
Christopher Russell & Mary
Dolejsi '80
Bruce '66 & Kay Samuelson
Anne R. Sarewitz '75
Clinton D. Schenk '39
David D. Schindel '63
Peter A. Schultz '81
William & Ann Reeves Seese
'65, '63
Gerald A. Selter '67
Walter W. Shuford '76
Christopher & Sherri Stover
Shumate '89
Thomas '68 & Oletia Simpson
Linda C. Singley '87
Sharon M. Smith '71
C. L. Johnson Smithhisler '62
Kenneth & June Fujinaga
Souza '68
Chad '82 & Linda Spaetig
Lynne M. Spangler '92
Laurence & Mildred Neustel
Starr '52, '46
Stephen Ames Ranch
Eric & Laura Martin Strom
'88, '89
Brian & Despina Tooulakou
Strong '84
Terrence '59 & Kaye Strong
Craig A. Tamaki '80
John Taylor '74 & Annette
Jourd
William '41 & Marian Teach
Michael Theobald '63 &
Marilyn Frisch
Alan '63 & Kay Thompson
Mark '70 & Karen Thorson
Steven '84 & Dana Trabun
James K. Tsuruta '90
Harris '42 & Eleanor
VanOrden
R. S. '79 & Aparna
Venkatachalam
Mike & Cindy Vincent '88
Steven B. Waples '74
John '85 & Sharon Watkins
James Wells '79 & Carol
Windsor
Earl Wheatley '71

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